

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: CORELITE

Report Number:

Luminaire Tested: SQ4-WB-125U-100D-927-1D-UNV-STD-W-4

Issue Date: 8/1/2024

Test Information

Test Method: LM-79-2019
Report Number:
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-24)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-WB-125U-100D-927-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1250 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

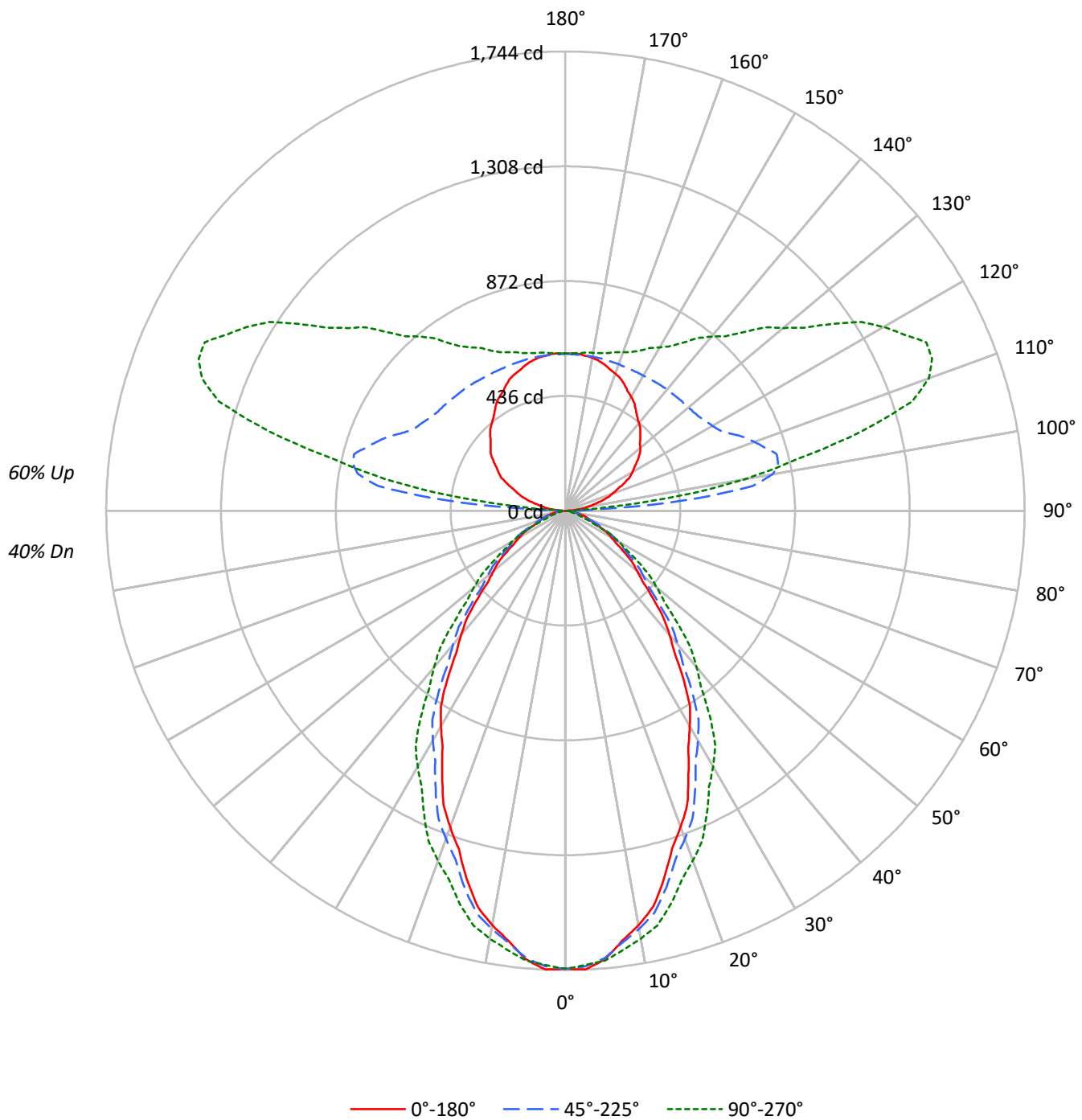
Lumens per Lamp: N/A
Luminaire Lumens: 6385.5 lumens
Efficiency: N/A
Efficacy: 99.0 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 64.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20
RC	80				70				50				30				10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	105	105	105	105	95	95	95	95	78	78	78	61	61	61	47	47	47
1	96	92	89	86	88	84	81	79	69	67	65	55	54	53	43	42	41
2	89	82	76	72	80	75	70	66	62	59	56	50	48	46	39	37	36
3	81	73	66	61	74	67	61	56	55	51	48	45	42	40	35	33	32
4	75	65	58	52	68	60	54	49	50	45	42	41	37	35	32	30	28
5	69	58	51	45	63	54	47	42	45	40	37	37	34	31	29	27	25
6	64	53	45	40	58	49	42	37	41	36	32	34	30	28	27	25	23
7	59	48	40	35	54	44	38	33	37	33	29	31	27	25	25	23	21
8	55	44	36	32	50	40	34	30	34	29	26	29	25	22	23	21	19
9	52	40	33	28	47	37	31	27	32	27	24	26	23	20	22	19	17
10	48	37	30	26	44	34	28	24	29	25	21	25	21	19	20	18	16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16048	16048	16048
5°	15848	15792	15883
10°	14973	15109	15459
15°	13822	14143	14777
20°	12552	13024	13886
25°	11258	11872	12937
30°	10066	10725	11953
35°	8803	9438	10789
40°	7409	7997	9340
45°	6114	6643	7797
50°	5106	5565	6496
55°	4333	4776	5364
60°	3703	4141	4281
65°	2949	3482	2766
70°	2614	2716	1689
75°	2420	2203	1034
80°	2232	2030	893
85°	2022	1863	730

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 7797 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	159.5	2.5
10°-20°	415.0	6.5
20°-30°	537.5	8.4
30°-40°	526.4	8.2
40°-50°	402.9	6.3
50°-60°	268.5	4.2
60°-70°	146.5	2.3
70°-80°	61.0	1.0
80°-90°	18.7	0.3
90°-100°	278.9	4.4
100°-110°	751.4	11.8
110°-120°	788.6	12.3
120°-130°	639.9	10.0
130°-140°	501.9	7.9
140°-150°	385.3	6.0
150°-160°	277.0	4.3
160°-170°	169.3	2.7
170°-180°	57.1	0.9
0°-30°	1112.1	17.4
0°-40°	1638.4	25.7
0°-60°	2309.8	36.2
0°-90°	2536.0	39.7
90°-120°	1819.0	28.5
90°-150°	3346.1	52.4
90°-180°	3849.0	60.3
0°-180°	6385.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1739	1739	1739	1739	1739	
5°	1711	1694	1705	1709	1715	159
15°	1447	1442	1481	1521	1547	404
25°	1106	1109	1166	1217	1271	509
35°	782	785	838	894	958	486
45°	469	478	509	548	598	365
55°	269	281	297	308	334	244
65°	135	146	160	139	127	140
75°	68	68	62	42	29	73
85°	19	19	18	11	7	21
90°	2	4	9	10	10	4
95°	42	152	457	234	162	44
105°	139	216	831	1243	1167	146
115°	245	300	692	1337	1512	241
125°	335	385	621	1050	1236	299
135°	403	450	604	847	959	311
145°	466	503	596	724	778	293
155°	530	549	591	650	671	244
165°	574	581	593	617	620	162
175°	597	596	594	602	601	57
180°	596	596	596	596	596	

TEST NUMBER:

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1739.4	1739.4	1739.4	1739.4	1739.4
2.5°	1743.7	1728.2	1732.1	1732.0	1727.2
5°	1711.2	1694.0	1705.1	1709.0	1715.0
7.5°	1647.7	1634.7	1654.9	1669.8	1681.9
10°	1598.2	1587.0	1612.7	1634.5	1650.1
12.5°	1540.8	1531.4	1563.3	1592.4	1612.9
15°	1447.1	1441.9	1480.7	1521.0	1547.1
17.5°	1346.8	1344.3	1388.8	1435.8	1469.2
20°	1278.4	1277.7	1326.5	1375.5	1414.3
22.5°	1209.4	1211.1	1262.4	1313.3	1357.5
25°	1105.9	1108.9	1166.2	1217.1	1270.8
27.5°	1010.2	1011.6	1070.8	1124.5	1181.8
30°	944.9	948.6	1006.7	1062.3	1122.0
32.5°	879.6	883.9	940.8	998.2	1059.1
35°	781.6	785.3	838.0	894.4	957.9
37.5°	680.5	685.6	732.4	785.7	848.1
40°	615.2	622.6	664.0	714.3	775.5
42.5°	552.3	561.5	599.9	647.6	702.8
45°	468.6	477.6	509.1	547.6	597.6
47.5°	396.6	406.9	431.1	464.3	506.9
50°	355.7	365.4	387.7	412.3	452.6
52.5°	319.6	329.3	349.3	368.2	402.5
55°	269.4	280.6	296.9	308.2	333.5
57.5°	228.2	239.0	251.9	257.0	272.3
60°	200.7	212.7	224.4	223.8	232.0
62.5°	175.7	185.8	197.5	189.4	189.9
65°	135.1	146.3	159.5	139.4	126.7
67.5°	109.1	111.5	125.2	97.2	82.1
70°	96.9	96.9	100.7	75.3	62.6
72.5°	85.3	85.3	81.8	61.2	47.9
75°	67.9	67.9	61.8	42.4	29.0
77.5°	52.4	51.8	47.3	31.7	21.1
80°	42.0	42.0	38.2	25.0	16.8
82.5°	32.8	32.8	29.6	19.5	12.5
85°	19.1	19.1	17.6	11.3	6.9
87.5°	7.0	7.6	7.9	5.6	5.0
90°	1.5	4.5	9.1	9.9	9.9
92.5°	18.5	65.5	129.4	62.3	43.3
95°	42.5	151.7	457.3	233.8	161.8
97.5°	67.9	173.7	717.2	599.2	451.8
100°	87.4	182.4	799.9	836.9	694.3
102.5°	106.2	194.7	827.2	1014.9	897.9
105°	139.0	216.3	831.0	1243.3	1166.8
107.5°	170.0	238.9	795.6	1360.6	1380.4
110°	190.7	256.0	763.4	1397.1	1469.1

TEST NUMBER:

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	212.5	273.1	732.4	1389.0	1507.4
115°	245.4	300.3	692.0	1337.1	1512.4
117.5°	275.3	326.8	660.7	1254.3	1449.5
120°	294.7	344.5	644.9	1194.9	1395.4
122.5°	311.7	360.9	633.4	1134.1	1334.0
125°	335.0	384.8	621.4	1050.2	1235.9
127.5°	357.3	406.3	613.8	976.2	1142.0
130°	370.7	419.7	610.7	933.8	1079.4
132.5°	384.1	432.5	607.7	896.5	1030.2
135°	403.4	450.2	603.9	847.2	959.4
137.5°	421.7	466.6	601.9	805.5	897.6
140°	434.5	477.6	600.1	779.7	862.9
142.5°	447.9	488.0	598.9	755.7	825.9
145°	466.4	502.8	596.3	724.4	777.8
147.5°	486.5	518.1	593.7	698.0	740.0
150°	499.8	527.3	592.5	681.4	716.3
152.5°	512.0	535.9	591.9	667.9	696.3
155°	529.5	548.8	591.0	649.9	670.7
157.5°	544.8	559.8	591.1	637.3	651.3
160°	554.5	567.1	591.7	630.0	640.4
162.5°	563.0	573.3	592.4	623.8	631.2
165°	574.3	581.0	593.3	616.9	619.8
167.5°	583.4	587.2	594.0	611.5	612.7
170°	589.5	590.9	594.0	608.5	608.5
172.5°	593.1	593.4	594.6	605.4	605.4
175°	597.1	596.3	594.0	602.3	600.9
177.5°	598.7	597.5	594.5	599.3	598.1
180°	596.3	596.3	596.3	596.3	596.3

(END OF REPORT)